

## **REMARKS**

Upon entry of this Amendment, claims 1-20 remain pending and under current examination. In the Office Action,<sup>1</sup> the Examiner took the following actions;

- (a) objected to the Information Disclosure Statement (IDS);
- (b) objected to claim 7 because of an informality;
- (c) rejected claims 1-10 and 15-17 under 35 U.S.C. § 102(e) as being anticipated by Baggenstoss et al. (U.S. Patent No. 6,374,396) ("Baggenstoss"); and
- (d) rejected claims 11-14 and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Baggenstoss in view of Chang et al. (U.S. Patent No. 6,470,489) ("Chang").

Applicants traverse the objections and rejections for the following reasons.

### **Regarding the Information Disclosure Statement (IDS):**

The Examiner alleged that the IDS's filed on May 6, 2004 and March 1, 2005 "fail to comply with 37 CFR 1.98(a)(3) because they do not include a concise explanation of the relevance ... of each patent listed that is not in the English language" (Office Action, p. 2).

Applicants dispute the Examiner's allegations for the reasons that follow, and request a complete and properly initialed copy of both the PTO-1449 filed on May 6, 2004, and the PTO/SB/08 filed on March 1, 2005.

First, Applicants note that the M.P.E.P. requires that

[e]ach information disclosure statement must further include a concise explanation of the relevance [...] of the information listed that is not in the English language. The concise explanation may be either separate from the specification or [ ]part of the specification. **If the concise explanation is part of the specification, the IDS listing should include the page(s) or line(s) numbers where the concise explanation is located in the specification.** M.P.E.P. § 609.04(a)(III), emphasis added.

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<sup>1</sup> The Office Action may contain statements characterizing the related art, case law, and claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

In light of this requirement, Applicants respectfully direct the Examiner's attention to the IDS filed on May 6, 2004, particularly at the last two lines on page 1, through the first four lines on the second page. Therein, Applicants stated

The following is a **concise statement of relevance** of the non-English language documents.

1. Japanese Patent Application KOKAI Publication No. 2001-230179 **is discussed on page 6 of the present application.**
2. Japanese Patent Application KOKAI Publication No. 9-63943 **is discussed on page 4 of the present application.** (emphasis added)

Thus, the IDS filed on May 6, 2004, fully complies with the requirements of 37 C.F.R. § 1.98(a)(3). Accordingly, Applicants request withdrawal of the objection to the IDS, and a complete and properly initialed copy of the PTO-1449 filed on May 6, 2004.

Second, Applicants note that the M.P.E.P. also requires that

Where the information listed is not in the English language, but was cited in a search report or other action by a foreign patent office in a counterpart foreign application, **the requirement for a concise explanation of relevance can be satisfied by submitting an English-language version of the search report or action which indicates the degree of relevance found by the foreign office.** M.P.E.P. § 609.04(a)(III), emphasis added.

In light of this requirement, Applicants respectfully direct the Examiner's attention to the IDS filed on March 1, 2005, particularly at the last two lines on page 1, through the first three lines on the second page. Therein, Applicants stated

In lieu of a statement of relevance or full translation of the non-English documents, **Applicants enclose a Taiwanese Patent Office Action** entitled "Notification of Reasons for Rejection in First Examination," mailed in a counterpart foreign application, **citing and setting forth the relevance** of the non-English documents. **An English language translation of the Taiwanese Patent Office Action is also enclosed.** (emphasis added)

Thus, the IDS filed on March 1, 2005, fully complies with the requirements of 37 C.F.R. § 1.98(a)(3). Accordingly, Applicants request withdrawal of the objection to the IDS, and a complete and properly initialed copy of the PTO/SB/08 filed on March 1, 2005.

Applicants therefore submit that “[o]nce the minimum requirements of 37 CFR 1.97 and 37 CFR 1.98 are met, the examiner has an obligation to consider the information.” M.P.E.P. § 609.

**Objection to Claim 7:**

The Examiner objected to claim 7 because of an informality. Specifically, the Examiner stated that in claim 7, line 12, “varing” should be “varying.” *See* Office Action, p. 2. In response, Applicants have amended claim 7 to correct the term “varing” to “varying.” Although not objected to, Applicants have made the same correction to claims 1, 11, 15, and 18. Therefore, Applicants request that the objection to claim 7 be withdrawn.

**Regarding the Claim Amendments:**

Applicants have amended claims 1, 7, 11, 15, and 18 to more appropriately define the present invention. Support for the amendments can be found in the specification at, for example, p. 4, lines 11-15, p. 16, and p. 23, lines 3-7.

**Rejection of Claims 1-10 and 15-17 under 35 U.S.C. § 102(e):**

Applicants request withdrawal of the rejection of 1-10 and 15-17 under 35 U.S.C. § 102(e) as being anticipated by Baggenstoss. Applicants traverse the rejection for at least the following reasons.

In order to properly establish anticipation under 35 U.S.C. § 102, the Federal Circuit has held that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros.*

*v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). *See also* M.P.E.P. § 2131.

Baggenstoss does not disclose each and every element of Applicants’ claimed invention. The Examiner alleges that Baggenstoss discloses “acquiring a transmittance characteristic that varies depending on the optical paths of light in a projection optical system specific to said projection optical system (Figure 2, 210 and Column 5, lines 25-43)...” (Office Action, p. 3). However, Baggenstoss discloses in column 5, lines 21-35, that the intensity variation across the field of exposure is determined by producing a mask having test patterns. Baggenstoss further discloses in column 5, lines 36-43, that the intensity variation across the field of exposure is determined based on the lens aberrations described by the Zernike polynomial.

Therefore, Baggenstoss does not disclose “acquiring a transmittance characteristic of the projection optical system...” as recited in independent claim 1. That is, Baggenstoss does not disclose Applicants’ claimed

acquiring a transmittance characteristic of the projection optical system, the transmittance characteristic representing an attenuated amount of amplitude of light, the attenuated amount of the amplitude of the light varying, depending on a difference in optical paths of the light in the projection optical system, and the light having passed through the projection optical system... (claim 1).

Moreover, Baggenstoss does not disclose “approximating a transmission factor variation of the projection optical system...” as recited in independent claims 7 and 15. That is, Baggenstoss does not disclose Applicants’ claimed

approximating a transmission factor variation of the projection optical system by use of an orthogonal polynomial defined by pupil coordinates of the projection optical system, the transmission factor variation representing variation of an attenuated amount of

amplitude of light, the attenuated amount of the amplitude of the light varying, depending on a difference in optical paths of the light in the projection optical system, and the light having passed through the projection optical system... (claims 7 and 15).

Therefore, Baggenstoss does not anticipate independent claims 1, 7, and 15. Independent claims 1, 7, and 15 are therefore allowable, and dependent claims 2-6, 8-10, 16, and 17 are also allowable at least by virtue of their respective dependence from base claim 1, 7, or 15. The 35 U.S.C. § 102(e) rejection is therefore improper and should be withdrawn.

**Rejection of Claims 11-14 and 18-20 under 35 U.S.C. § 103(a):**

Applicants request reconsideration and withdrawal of the rejection of claims 11-14 and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Baggenstoss in view of Chang. Applicants respectfully disagree with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established. As M.P.E.P. § 2142 states, "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness."

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). M.P.E.P. § 2142, 8th Ed., Rev. 4 (October 2005), p. 2100-134.

Each of these requirements must "be found in the prior art, and not be based on applicant's disclosure." M.P.E.P. § 2143. A requirement for establishing a *prima facie* case of obviousness is not met, because Baggenstoss and Chang, taken alone or in combination, do not teach or suggest every feature of Applicants' claims.

Applicants have previously established that Baggenstoss does not teach or suggest all the elements of independent claims 1, 7, and 15. Similar to independent claims 7 and 15,

independent claims 11 and 18 recite “approximating a transmission factor variation of the projection optical system...” Applicants therefore submit that Baggenstoss also does not teach or suggest all the elements of independent claims 11 and 18.

In addition, the Examiner admitted that, in reference to independent claims 11 and 18, “Baggenstoss does not teach determining if a predicted pattern lies within a predetermined tolerance to the designed pattern and only correcting the areas of the photomask that are not within the predetermined tolerances. Baggenstoss corrects all areas of the photomask” (Office Action, p. 5). The Examiner therefore cited Chang.

The Examiner’s application of Chang, however, fails to cure the deficiencies of Baggenstoss already discussed. That is, Chang also fails to teach or suggest at least the claimed “approximating a transmission factor variation of the projection optical system...” as recited in independent claims 11 and 18.

Even if Chang were combined with Baggenstoss as the Examiner suggests, Baggenstoss and Chang do not teach or suggest all elements recited in independent claims 11 and 18, and required by dependent claims 12-14, 19, and 20. Therefore, the Examiner’s citation of Baggenstoss and Chang does not establish *prima facie* obviousness of any of claims 11-14 and 18-20. For at least these reasons, the Examiner’s rejection is improper and should be withdrawn.

**Conclusion:**

In view of the foregoing, Applicants request reconsideration of the application and withdrawal of the objection and rejections. Because Applicants’ amendments and arguments have removed all of the pending objections and rejections, claims 1-20 are in condition for allowance. Applicants request a favorable action.

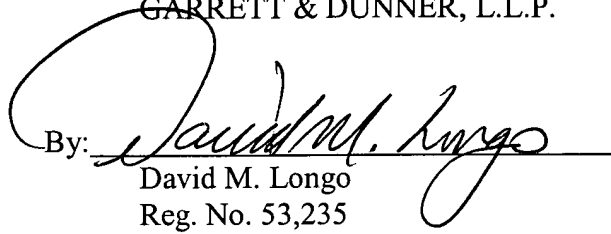
If there are any remaining issues or misunderstandings, Applicants request the Examiner telephone the undersigned representative to discuss them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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